

Remarks/Arguments

Claims 1 to 20 are pending in the application. Claims 1, 9, 11, 12, 14, 15 and 18-20 are rejected.

Claims 2 to 8, 10, 13, 16 and 17 are objected to.

Claims 1 to 20 remain in the application. Claims 1-6, 9 and 11 have been amended.

Specifically, claims 1-6, 9 and 11 have been amended in order to avoid invoking 35 U.S.C. 112, sixth paragraph. In particular, all instances of phrases such as --the steps of-- have been deleted. Applicant wishes to note for the record that the amendments are neither narrowing, nor are the amendments being made for a reason substantially related to patentability. Applicant respectfully submits that no new matter has been added in the amendments.

Examiner has rejected claims 1, 9, 11, 12, 14, 15 and 18-20 under U.S.C. 103(a) as being obvious in light of the combination of Tomko (US patent #4,876,725) and Hoffman (US patent #5,706,218). The prior art of Tomko describes a biometric personal authentication system in which specific efforts are made to filter out noise in the signal generated when fingerprints are scanned. In contrast, the invention described with reference to amended independent claims 1, 9 and 11, describes using noise, specifically: "...based on the noise based value providing the number within the random sequence of numbers." In this way, the method according to the invention uses what is otherwise unwanted noise to provide a useful outcome. Similarly, independent claims 12 states: "...wherein at least a portion of the signal comprises white noise presented to or from within the imaging device; and, a processor for receiving the signals from at least two imaging sensors of the imaging sensor array and for determining a value based on the portions of the signals comprising white noise." The prior art of Tomko seeks to filter out noise, it does not suggest determining a value for the noise. As such claim 12 cannot be obvious in light of Tomko. Independent claim 18 states that: "...the output signal comprises a plurality of pixel values, each pixel

value of the plurality of pixel values relating to one pixel at a known location within the sensed image; and,
a processor for receiving the signals from at least two sensing electrodes of the array of sensing electrodes and for determining a value based on the portions of the signals comprising white noise.” Once again, the prior art of Tomko seeks to remove noise from a signal. In contrast, the method of independent claim 18 determines a value from a signal with noise. Thus, it is clear that the prior art of Tomko not only fails to render the invention obvious but also teaches away from the invention.

Hoffman teaches a random number generator with a circuit for providing a white noise signal and an array of ring oscillators. As is well known in the art of cryptography it is highly desirable to have a noise source that is not entirely dependent upon electronically generated input signals simply to ensure that the input signals themselves are not predictable. Effectively, Hoffman is using an electronic signal that should have a noisy quality and using the signal to generate other electronic signals that have substantially equivalent occurrences of “0”s and “1”s. The very nature of the Hoffman prior art is intended to ensure that a random number generator is able to provide pseudo-random numbers absent a need for an external noisy signal. The invention as recited in independent claims 1, 9 and 12 specifically incorporates “imaging sensors”, similarly independent claims 11 and 18 incorporate “sensing electrodes”. The use of a sensor for receiving an external signal is not contemplated by Hoffman and therefore the independent claims of the present application are not obvious in light of Hoffman.

It is uncertain how a person of skill in the art would combine the prior art of Tomko and Hoffman. Specifically, Tomko goes to substantial lengths to filter noise from a biometric input signal while Hoffman uses an electronic white noise generating circuit to enhance an electronic random number generator. In this way, neither prior art reference suggests any synergy with the other. Similarly it is uncertain what the motivation to combine them would be or what type of device would result. With this in mind it is apparent that independent claims 1, 9, 11, 12 and 18 are not rendered obvious by the combination of Tomko and Hoffman. Claims 14 and 15 depend from claim 12, which is not obvious and

therefore claims 14 and 15 cannot be obvious. Similarly, claims 19 and 20 depend from independent claim 18, which is not obvious, therefore claims 19 and 20 are not obvious.

A Petition for Extension of Time is filed concurrently with this response.

Applicant kindly requests favorable reconsideration of the amended application.

Please charge any additional fees required or credit any overpayment to Deposit Account No: 50-1142.

Respectfully,

A handwritten signature in black ink, appearing to read 'G Fre', with a long horizontal stroke extending to the right.

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